## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A method for laser microdissection of specimen regions [[(23)]] of interest of a specimen [[(4)]] that is mounted on a specimen holder [[(3)]], characterized by the following steps comprising:
- a) cutting, with a focused laser beam [[(7)]] having a defined cut width, along an incomplete cut line [[(25)]] largely enclosing the specimen region [[(23)]] of interest, such that there remains between [[the]] a beginning and end of the cut line [[(25)]] a stable web [[(26)]] of defined width by way of which the specimen region [[(23)]] of interest is joined to the surrounding specimen [[(4)]]; and
- b) severing the web [[(26)]] with a laser pulse, directed onto the web [[(26)]], of a focused laser beam [[(7)]] having [[a]] an enlarged cut width enlarged as compared to the previous cutting said defined cut width.
- 2. (Currently Amended) The method as defined in Claim 1, wherein the defined cut width during cutting is much narrower than the <u>enlarged</u> cut width <del>of the laser beam (7)</del> when severing the web (26).
- 3. (Currently Amended) The method as defined in Claim 1, wherein the defined cut width during cutting is generated by attenuating [[the]] <u>a</u> laser intensity as compared to [[the]] <u>a</u> laser intensity when severing the web [[(26)]].
- 4. (Currently Amended) The method as defined in Claim 1, wherein the <u>enlarged</u> cut width of the laser beam (7) when severing the web (26) corresponds at least to [[the]] <u>a</u> width of the web [[(26)]].
- 5. (Currently Amended) The method as defined in Claim 1, wherein the laser pulse is directed onto the center of the web [[(26)]].

6. (Currently Amended) An apparatus for laser cutting of microscopic specimens [[(4)]], comprising:

a microscope (1) having configured for viewing of a specimen having a specimen region of interest, comprising: at least one objective [[(9)]] that defines an optical axis; (10), for viewing of a specimen (4) having a specimen region (23) of interest, and having a laser [[(6)]] that generates a laser beam; [[(7)]] and at least one optical system [[(13)]] that couples the laser beam [[(7)]] into the objective [[(9)]], wherein

- a) a cut line control unit [[(2; 31)]] is associated with the microscope (1) in order and configured to generate a relative movement between the laser beam [[(7)]] and the specimen [[(4)]] to achieve an incomplete cut line [[(25)]] largely enclosing the specimen region [[(23)]] of interest, such that there remains between [[the]] a beginning and end of the cut line [[(25)]] a stable web [[(26)]] of defined width by way of which the specimen region [[(23)]] of interest is joined to the surrounding specimen [[(4)]]; and
- b) means for severing the web [[(26)]], with which [[the]] <u>a</u> cut width of the laser beam [[(7)]] is enlarged and a single focused laser pulse is directed onto the web [[(26)]] and severs the web [[(26)]], are provided.
- 7. (Currently Amended) The apparatus as defined in Claim 6, wherein the laser beam [[(7)]] is stationary and the cut line control unit comprises a displaceable X-Y stage [[(2)]] which moves the specimen [[(4)]] relative to the stationary laser beam [[(7)]] during cutting.
- 8. (Currently Amended) The apparatus as defined in Claim 6, wherein the cut line control unit comprises a laser scanning device [[(31)]] which moves the laser beam [[(7)]] relative to a stationary specimen [[(4)]] during cutting.
- 9. (Currently Amended) The apparatus as defined in Claim 6, wherein a laser control unit which controls [[the]] operating parameters of the laser [[(6)]] is associated with the laser [[(6)]].
- 10. (Currently Amended) The apparatus as defined in Claim 6, wherein an autofocus apparatus for the laser beam [[(7)]] is associated with the laser [[(6)]].

- 11. (Currently Amended) The apparatus as defined in Claim 9, wherein a computer [[(16)]] for controlling the cut line control unit [[(2; 31)]] and the laser control unit is associated with the microscope.
- 12. (Currently Amended) The apparatus as defined in Claim 6, wherein means for automatic enlargement of the cut width of the laser beam [[(7)]] and for automatic execution of a single laser pulse, directed onto the web [[(26)]], with that cut width, are associated with the microscope.
- 13. (Currently Amended) The apparatus as defined in Claim 6, wherein means for selection of the cut line [[(25)]] by a user are provided.
- 14. (Currently Amended) The apparatus as defined in Claim 6, wherein means for selection of the <u>defined</u> width of the web [[(26)]] by a user are provided.
- 15. (Currently Amended) The apparatus as defined in Claim 6, wherein means for selection of the location of the web [[(16)]] by a user are provided.
- 16. (Previously Presented) A method for laser microdissection of a specimen region of interest of a specimen, comprising:
- (a) cutting with a laser beam along an incomplete cut line such that there remains a stable web by way of which the specimen region of interest is joined to the surrounding specimen; and
  - (b) severing the web with a laser pulse, directed onto the web, of a laser beam.
- 17. (Previously Presented) A method as set forth in claim 16, wherein step (b) comprises severing the web with a single laser pulse.
- 18. (Previously Presented) A method as set forth in claim 16, wherein step (a) comprises cutting with a focused laser beam and step (b) comprises severing the web with a laser pulse of a focused laser beam.
- 19. (Previously Presented) A method as set forth in claim 16, wherein step (b) comprises severing the web with a laser pulse of a laser beam having a cut width enlarged as compared to step (a).

- 20. (Previously Presented) A method as set forth in claim 16, wherein in step (a) there remains only one stable web.
- 21. (Previously Presented) A method as set forth in claim 20, wherein the only one stable web remains between the beginning and end of a cut line.
- 22. (Previously Presented) A method as set forth in claim 16, wherein the incomplete cut line largely encloses the specimen region of interest.
- 23. (Previously Presented) A computer readable storage medium containing instructions to perform the method of claim 16.
- 24. (Previously Presented) An apparatus for laser cutting of microscopic specimens comprising:

a microscope having at least one objective that defines an optical axis, for viewing of a specimen having a specimen region of interest;

a laser that generates a laser beam and at least one optical system that couples the laser beam into the objective; and

a control unit associated with the microscope which generates a relative movement between the laser beam and the specimen to achieve an incomplete cut line such that there remains a stable web by way of which the specimen region of interest is joined to the surrounding specimen, and to sever the web with a laser pulse directed onto the web.

- 25. (Previously Presented) An apparatus as set forth in claim 24, wherein the control unit severs the web with a single laser pulse.
- 26. (Previously Presented) An apparatus as set forth in claim 24, wherein the incomplete cut line is formed by a focused laser beam and the web is severed using a focused laser beam.
- 27. (Previously Presented) An apparatus as set forth in claim 24, wherein the web is severed with a laser pulse of a laser beam having a cut width enlarged as compared to a cut width used to achieve the incomplete cut line.

- 28. (Previously Presented) An apparatus as set forth in claim 24, wherein after the incomplete cut line is achieved there remains only one stable web.
- 29. (Previously Presented) An apparatus as set forth in claim 28, wherein the only one stable web remains between the beginning and end of a cut line.
- 30. (Previously Presented) An apparatus as set forth in claim 24, wherein the incomplete cut line largely encloses the specimen region of interest.
- 31. (Previously Presented) An apparatus as set forth in claim 24, wherein the microscope comprises an upright microscope.
- 32. (Previously Presented) An apparatus as set forth in claim 24, wherein the microscope comprises an inverted microscope.
- 33. (Previously Presented) An apparatus as set forth in claim 24, wherein the apparatus further comprises a displaceable X-Y stage.
- 34. (Previously Presented) An apparatus as set forth in claim 24, wherein the apparatus further comprises a laser scanning device.
- 35. (Previously Presented) An apparatus as set forth in claim 24, further comprising an autofocus apparatus.
- 36. (Currently Amended) An apparatus as set forth in claim 24, further comprising an input unit to receive an instruction from a user which designates [[a]] the cut line.
- 37. (Currently Amended) An apparatus as set forth in claim 24, further comprising an input unit to receive an instruction from a user which designates a width of [[a]] the web.
- 38. (Currently Amended) An apparatus as set forth in claim 24, further comprising an input unit to receive an instruction from a user which designates a location of [[a]] the web.
- 39. (Previously Presented) The method as defined in claim 1, wherein step b) comprises severing the web with a single laser pulse.